In the Museum of the Geological Survey, at Jermyn Street, we have seen the following specimens from the Lower Carboniferous rocks of Ireland:—

1. "Carboniferous Limestone," near Kildare. Entomoconchus Scouleri (gregarious).

2. "Lower Limestone Shales."

a. Fermanagh (Sheet 18, Nos. 3 & 4; and Portlock's 'Geol. Report,' pl. 24. fig. 13 c). Grey shale. Leperditia subrecta and

L. Scotoburdigalensis.

b. Kilkenny (Sheet 31/4); south of Knocktopher, and about a mile west of Ballyhale. Argillaceous schist, containing Rhynchonella pleurodon, and having rusty facings and badly preserved casts of Leperditia subrecta.

X.—Notices of British Fungi. By the Rev. M. J. Berkeley, M.A., F.L.S., and C. E. Broome, Esq., F.L.S.

[Plate II.]

[Continued from vol. xv. ser. 3. p. 452.]

1104. Agaricus (Amanita) lenticularis, Lasch in Linn. 1827, No. 18.

Coed Coch, Oct. 1866.

A single specimen of this magnificent species, according exactly with a figure received from Fries, occurred last autumn in the plantations surrounding the gardens at Coed Coch. It is remarkable for the great development of the ring and the smooth pinkish-tan pileus.

1105. A. (Lepiota) Friesii, Lasch in Linn. 1828, no. 9.

Jedburgh, A. Jerdon, Esq.

1106. A. (Tricholoma) saponaceus, Fr. Ep. p. 35.

In woods. King's Cliffe, Sept. 1, 1865.

This occurred in great profusion and perfection. A. graveolens, Sow., which is quoted under A. saponaceus by Fries, is undoubtedly A. gambosus, as appears from the original drawing and the notes which accompany it.

1107. A. (Clitocybe) pithyophilus, Fr. Ep. p. 62.

In fir-woods. Coed Coch, Oct. 19, 1865.

1108. A. (Clitocybe) trullæformis, Fr. Ep. p. 68.

On the border of a fir-wood. Coed Coch, Oct. 27, 1865. The rather distant gills, which are connected with veins and

The rather distant gills, which are connected with veins and infundibuliform pileus, distinguish this species, which is not hygrophanous.

*A. (Clitocybe) inversus, Scop. Carn. p. 445.

Several tufts of this species occurred late in the year at

4*

Woodnewton, in a ditch at a distance from any fir-wood, exactly according with Sowerby's figure.

1109. A. (Collybia) exsculptus, Fr. Ep. p. 93.

On old oak stumps. Apethorpe, Norths.; Badminton. On turf. Ilford, Essex, C. E. Broome.

Allied to A. dryophilus, but tougher. The gills are sulphur-

coloured and transversely striate.

1110. A. (Collybia) protractus, Fr. Ep. p. 97.

On the ground. Ascot, Nov. 22, 1865.

*A. (Mycena) pelliculosus, Fr. Ep. p. 116.
On the ground. Hanham, C. E. Broome.
1111. A. (Mycena) vitreus, Fr. Ep. p. 111.

In woods. Bryn Tyrch, Caernarvonshire, Oct. 1865. 1112. A. (Omphalia) gracillimus, Weinm. Ross. p. 121.

In marshy ground, on decaying stems of vegetables. King's Cliffe, Aug. 18, 1865.

1113. A. (Entoloma) griseo-cyaneus, Fr. Ep. p. 145.

On lawns. Coed Coch, Oct. 1865.

1114. A. (Clitophilus) popinalis, Fr. Ep. p. 169. On downs. Worthing, Oct. 1865, F. Currey, Esq.

A curious species, with a strong odour of new meal, and probably esculent. The pileus and flesh are of a greyish tint, the gills strongly decurrent, and the spores pink.

1115. A. (Clitophilus) cancrinus, Fr. Ep. p. 150. In a grass-field. Apethorpe, Norths. Aug. 16, 1865.

Exactly agreeing with an original drawing from the Swedish Museum. Pileus of a very pale flesh-colour or whitish, at first umbilicate; gills distant, at first white.

1116. A. (Nolanea) junceus, Fr. Ep. p. 156.

In a wood near Pont Gyffyng, Caernarvonshire, Oct. 24, 1865.

Exactly agreeing with a drawing from Fries. 1117. A. (Hebeloma) deglubens, Fr. Ep. p. 173.

In woods. King's Cliffe, Aug. 18, 1865. Exactly agreeing with a drawing from Fries. 1118. A. (Hebeloma) hiulcus, Fr. Ep. p. 175.

In woods. Fineshade, Sept. 1, 1865.

Allied to A. rimosus; but the flesh turns everywhere reddish when cut or bruised.

1119. A. (Flammula) gummosus, Lasch in Linn. 1827, no. 325. On old stumps in the plantations round the Botanic Garden at Cambridge, Dec. 6, 1865.

1120. A. (Flammula) carbonarius, Fr. Ep. p. 186.

In fir-woods where the undergrowth had been burnt, at Ascot, Nov. 22, 1865.

This species, remarkable for its viscid pileus, squamulose

stem, and adnate clay-coloured gills, occurred in immense quan-

tities at the above-mentioned locality.

1121. A. (Naucoria) autochthonus, n. s. Pileo obtuso, hemisphærico, ochreo-albo, sericeo, margine flocculoso; stipite tenui, flexuoso, sursum basique albo-lanato incrassato; lamellis melleis horizontalibus distincte dente adnatis.

On the naked soil. Woodnewton, Norths.

Pileus $\frac{1}{4}$ inch across; stem $\frac{3}{4}$ inch high, not half a line thick in the centre. Spores paler than in A. furfuraceus, 00019 inch long (those of A. furfuraceus 00022 inch long). It does not become pallid in drying, like that species, but is of an ochraceous white from the first. It is probably a very common species.

1122. A. (Naucoria) escharoides, Fr. Ep. p. 201. On the bare ground. Apethorpe, Aug. 16, 1865.

Exactly the plant of Schæffer, t. 226.

Pileus campanulate, obtuse, slightly fleshy, umbonate or umbilicate, sometimes plane, hygrophanous, innato-squamulose, often venulose, tawny, at length pallid; veil white, evanescent; stem flexuous, nearly equal, clothed with white fibrils, pale, ringless, fistulose; gills broad, bright cinnamon, distant, fixed, acute behind, at length seceding; spores '0006-'00065 inch long, of a pure ochre, not peroxidate. Brittle.

1123. A. (Galera) aleuriatus, Fr. Ep. p. 203.

On rotten sticks, &c. Coed Coch, Oct. 26, 1865.

An extremely pretty species, exactly according with a figure from Fries.

1124. A. (Galera) mycenopsis, Fr. Ep. p. 208.

In marshy ground, in a wood amongst Sphagna. King's Cliffe, Aug. 18, 1865.

Our plant belongs to a variety, mentioned by Fries, with ad-

nate gills.

Pileus with the margin clothed with little white scales, the remains of the veil; stem slightly furfuraceous above; gills

adnate, not merely fixed with a tooth.

The species occurred also in Oct. at Pont Gyffyng, between Bettws and Capel Curig, and near Lake Idwell, where Ag. semilanceatus was abundant, with pallid gills entirely devoid of spores.

1125. A. (Galera) paludosus, Fr. Ep. p. 209.

In marshy ground in a wood, amongst Sphagna. King's Cliffe, Aug. 18, 1865.

1126. A. (Hypholoma) hydrophilus, Bull. t. 511.

In woods, &c. Not uncommon in England. Coed Coch, Oct. 23, 1865.

This species was described in the 'English Flora,' but was by some accident omitted in the 'Outlines of English Botany.'

The veil, though fugacious, at once distinguishes it from some other species with which it might easily be confounded.

*A. (Psathyra) corrugis, P., b. gracilis, Fr. Ep. p. 231. A.

pellospermus, Bull. t. 561. f. 1.

On the ground. Woodnewton, Aug. 20, 1865.

1127. A. (Panæolus) leucophanes, n. s. Pileo campanulato, obtuso, viscido, sicco nitido, innato-sericeo albo, hic illic sub-ochraceo; margine appendiculato; stipite sursum attenuato, albo, fibrilloso, particulis farinaceis sparso, transversim sub-undulato fistuloso, lamellis adnatis e pallide griseo-carneis atris, margine albo.

In grass-fields. King's Cliffe, Aug. 29, 1865.

A very pretty species, allied to A. separatus. Pileus \(\frac{3}{4}\) inch across; stem 2 inches high, about 1 line thick in the centre; spores \(\cdot 00037\) inch long, somewhat cymbiform.

PLATE II. fig. 1. A. leucophanes and vertical section, nat. size.

1128. Cortinarius (Inoloma) camphoratus, Fr. Ep. p. 280.

On the ground in woods. Fineshade, Sept. 1, 1865.

*C. (Inoloma) Bulliardi, Fr. Ep. p. 282. In woods. Fineshade, Sept. 1, 1865.

Remarkable for its bright-red mycelium. 1129. C. (Hygrocybe) decipiens, Fr. Ep. p. 312.

In woods. Fineshade, Sept. 1, 1865.

1130. C. (Hygrocybe) Junghuhnii, Fr. Ep. p. 314.

In woods. King's Cliffe, Aug. 30, 1865.

Spores '0003 inch long.

1131. Russula cyanoxantha, Fr. Mon. Hym. Suec. p. 194 (A. cyanoxanthus, Schæff. t. 93).

In woods. Fineshade, Northamptonshire, Sept. 1, 1865.

1132. R. veternosa, Fr. Ep. p. 354.

On the ground. J. Fryer, Esq., Chatteris.

A single specimen only of this species was sent from the above locality to the 'Gardener's Chronicle' office to be named.

1133. R. lactea, Fr. Ep. p. 355.

On the ground. King's Cliffe, Aug. 29, 1865.

The thick, distant gills and milk-white pileus characterize

this fine species, which is probably widely diffused.

1134. Cantharellus radicosus, n. s. Pusillus; pileo profunde umbilicato, floccoso, nigro; stipite pallido, radicante; hymenio candido; lamellis angustis.

On the bank of a gravel-pit. Ascot, Nov. 22, 1865.

Pileus \(^34\)-1 inch across, deeply umbilicate, dark brown or black, rough with radiating flocci; stem rooting, deeply pallid; gills narrow, white. Two or three pilei often grow from the same obconical root, which is white and spongy.

This agrees in some respects with *C. carbonarius*, Alb. & Schw., which is said to be a variety of *C. umbonatus*, and must therefore be very different from the present species. *C. anthracophilus*, Lév., appears more nearly allied, but has a very different habit.

1135. C. crispus, Fr. Ep. p. 369.

On branches of beech. Jedburgh, A. Jerdon, Esq.

This very pretty species has occurred two years running. The colour of the pileus varies from a yellowish brown to white.

*Marasmius Stephensii, Bk. & Br., Ann. of Nat. Hist. ser. 2. vol. xiii. p. 403. This is probably synonymous with Marasmius terginus, Fr.

1136. M. caulicinalis, Fr. Ep. p. 383.

On the ground, amongst leaves, in a fir-wood. Ascot, Nov. 22, 1865.

Pileus smooth, white tinged with ochre, at length sulcato-

striate; gills adnato-decurrent, connected by veins.

Our plant seems paler in colour than that of Fries, but agrees in essential characters.

*Strobilomyces strobilaceus, Berk. Outl. p. 236.

A specimen of this rare fungus was sent from Ludlow by the Rev. A. Bloxam.

1137. Polyporus (Anodermei) cuticularis, Fr. Ep. p. 458. On trunks of trees. Burnham Beeches, C. E. Broome.

The hairs are curiously trifid at the apex; the spores yellow, as in P. hispidus.

1138. P. (Placodermei) fulvus, Fr. Ep. p. 466.

On decayed trunks of trees. Batheaston, C. E. Broome.

The specimen appears to have been gathered on a dead plum, and exactly accords with one on poplar, from Fries, in the resupinate state. It occurs on various trees, and is very distinct from P. igniarius.

1139. P. (Inodermei) hirsutus, Fr. Ep. p. 477.

On dead trunks. Orton Wood, near Twycross, Rev. A. Bloxam.

Certainly a very rare species in England, though one of the most common in warmer countries. The larger pores at once stinguish it from P. versicolor, zonatus, and velutinus.

*Craterellus cornucopioides, Fr. Ep. p. 532.

As some doubt has been raised with respect to the specific difference of Cantharellus cinereus, it may be well to state that both were gathered at Burnham Beeches last autumn, and that the spores of the former are 0006 inch long by 00035, those of the latter 0004 long by 00015. In the former, moreover, the sporophores are forked above, and the spicules long and often less than four in number; in the latter the sporophores are obtuse and the spicules four.

*Sparassis crispa, Fr. Ep. p. 570; Hogg & Johns. tab. 24.

Three large specimens of this noble addition to our flora occurred at Didlington, near Brandon, whence it was sent by Admiral Mitford.

1140. Calocera striata, Fr. Ep. p. 582.

On a prostrate trunk. Batheaston, March 10, 1846, C. E. Broome.

Exactly agreeing with Hoffmann's figure. A very rare plant, which has very seldom been seen by botanists. Spores 0003 inch long, 00025 broad.

1141. Apyrenium armeniacum, n. s. Receptaculo lobato, subgelatinoso, armeniaco, e filis ramosis, apice sporiferis, oriundo;

sporis obovatis, enucleatis.

On oak sticks, bursting through Corticium cinereum: Charmy

Down, near Batheaston, Oct. 1865.

Spores 0003-0005 inch long. This little fungus, though Tremelloid, has not the structure of Tremella. Pyrenium lignatile, Tode, is now pronounced by Tulasne to be a state of Hypocrea rufa. Our plant may possibly be a condition of H. gelatinosa; but, even should this prove to be the case, it is well in the meantime that it should be recorded.

PLATE II. fig. 2. Spores on their sporophores, highly magnified.

1142. Reticularia applanata, n. s. Effusa, tenuis, olivaceofusca; sporis olivaceis, echinulatis.

On the fallen trunk of a tree, the surface of which had been

charred. Ascot, Nov. 22, 1865.

Resembling in habit *Licea applanata*. Surface reticulated as in *R. maxima*. Spores 4-7, in a fascicle, connate, echinulate, 0005 inch in diameter.

PLATE II. fig. 3. a. part of the peridium, with the irregular flocci proceeding from it, magnified; a'. part of the peridium seen from above, stretching over the processes which run down from it, ditto; b. spores, more highly magnified, in groups and separate.

1143. Trichia flagellifer, n. s. Globosa, sessilis, metallica; floecis apice flagelliferis; sporis carneis.

On spruce fir. Badminton, Dec. 1865.

Perfectly globose, but fixed only by a small portion of the surface, which slightly projects, smooth, bay, reflecting metallic tints like a *Physarum*; flocei divided above two or three times; spores '0003-0004 in diameter.

Perfectly distinct from every other Trichia by the colour of the spores and metallic coat, in addition to the flagelliform

threads.

PLATE II. fig. 4. a. single plant, magnified; b. threads, magnified; c. ditto, more highly magnified; d. spores, magnified.

[To be continued.]